

**ATTACHMENT A**  
**Remarks**

Considering the matters raised in the Office Action in the same order as raised, turning first to the drawings, a new Figure 1 is submitted wherein the figure is labeled "Prior Art."

Claims 1-7 have been rejected under 35 U.S.C. 103(a) as being "unpatentable over Applicant's Admitted Prior Art"(AAPA)." This rejection is respectfully traversed, although claims 1-7 have been canceled and replaced by new claims 8-14. New claim 8 corresponds to original claim 1 after being amended to more clearly define over the prior art.

New claim 8 recites, inter alia, that the second part of the transmitter apparatus "includes a connecting cable for connecting the second part at least near to phase or zero rails of the electrical network wherein the length of the connecting cable is under 5 m and the connection is not in or to a wall outlet." A key advantage of the present invention is that during the transmitted mission of the actual transmitted load signal ( $U_{load}$  in the drawings) between the phase rail (L) and the zero rail (N), the rail signal e.g., its signal received at the switchboard, may be greater than five times that provided by the prior art. Reference is made in this regard to the attached Figure 1C and Figure 2. Thus, the present invention as claimed in claim 8 eliminates temporary loss of the carrier wave signal, and among many other advantages, the signal to noise ratio is better, the bit error rate (BER) is lower, the data transmission speed is higher, the reliability of the data transmission is improved, and the operating distance is longer. In addition, the invention enables new PLT products to be developed. With the present invention, it is not necessary that the entire apparatus be coupled to a wall outlet (plug-

in apparatus) or near to a wall outlet because the apparatus is divided into two parts. The first part normally includes operating switches, push buttons, LEDs and the like, and may be located near the operator. On the other hand, only the remote unit (TX/REMU) must be located close to the switchboard. Without the present invention, the signal attenuation associated with the fixed connecting cable (denoted  $L_w$  (sb-wo)), indicated in the attached Figures 1A and 1B, is greater the longer the cable. It is important to note that the situation is changed is not changed if the plug-in remote unit (TX/REMU) is located in the wall outlet, as in the prior art. Again, with the present invention, the real load signal ( $U_{load}$ ) is greatly increased because the signal attenuation provided by the fixed connecting cable between the switchboard unit and the wall outlet ( $L_w$  (sb/wo)) is either totally eliminated or almost totally eliminated by locating the remote unit (TX/REMU) inside of the switchboard unit or near the switchboard unit, i.e., at least near to the phase rail and zero rail, as set forth in claim 8.

It is respectfully submitted that the present invention provides real, important advantages that are simply not obvious from the prior art. In this regard, it is respectfully submitted that in the case of in re Aller cited by the Examiner does not apply here because "the general conditions" of claim 1 are not disclosed in the prior art and, further, more than discovering optimum or workable ranges is involved. Moreover, as should be apparent from the discussion above, more than simply decreasing the attenuation on the transmission line by reducing the length of the connecting cable is involved here. Again, it is respectfully submitted that given the actual teachings of the prior art, the present invention as claimed in new claim 8 is simply not obvious from these teachings.

Finally, some minor amendments have been made to the specification in order to clarify the meaning of some of the terms, (e.g., "nets" has been changed to --nets, i.e., electrical networks--).

Allowance of the application in its present form is respectfully solicited.

END OF REMARKS